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Railroading for Profit, Part V:
The buyer and his need for quality

October 29, 1979

RAILWAY AGE

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The intermodal alternative:

Looking better all the time

RAILWAY AGE

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Editorial and Executive Offices
New York, N.Y. 10013, 350 Broadway
(212) 966-7700

ROBERT G. LEWIS: Publisher
LUTHER S. MILLER: Editor
FRANKLYN K. LAUDEN: Managing Editor

Associate Editor: June Meyer
Contributing Editor: William D. Middleton
Art Director: Maurice H. Mates
Graphics Director: Martin Kossoy

Production: M.J. Figa, Jr.
Manager-Contract Department: Concetta Parisi
Manager-Circulation Fulfillment: Evan Phoutrides
Editorial Consultant: George Dusenbury

Editorial and Executive Offices
Chicago, Ill. 60602, 29 E. Madison St.
(312) 641-5815

GUS WELTY: Senior Editor
Associate Editor: Frank Malone

Engineering:
Merwin H. Dick, William J. Semioli
Editorial Assistant: Wanda Welty

Washington, D.C. 20045
National Press Bldg. (202) 347-1155

Associate Editor: John H. Armstrong
Associate Editor: Tom Kizzia

Falmouth, Cornwall, TR11 4RJ, England
P.O. Box 8 (Cable: MISBOARD)
Telephone: 44-326-313945

International Editors:
John Levett Michael Knutton

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Inside

LUTHER S. MILLER

INGRAM: "WE LEAVE WITH PRIDE..."

On Wednesday, Oct. 3, Rock Island's six top officers were notified by RI Trustee William M. Gibbons that their services would no longer be required. The trustee acted on written instructions from Vernon C. Coe, president and general manager of the Kansas City Terminal, the Rock's ICC-appointed "directed service" carrier. Among those dismissed were three who had been most prominently identified with the railroad's struggle to stay alive: John Ingram, president; John D. Mitros, executive vice president; and Chris Knapton, vice president–public relations and government affairs. On Oct. 4, Ingram put out the following message:

"To: Rock managers, supervisors, newly created officers, overworked volunteers—in short, the hardest-working railroaders anywhere.

"Five years ago the so-called experts said the Rock couldn't last six months. The fact that we lasted ten times that long is due entirely to the sweat, imagination, determination, innovation, and raw American stubbornness of men and women who were determined to prove the experts wrong. You all did that admirably and well. Today's unhappy capitulation is not your fault. It is the fault of extreme weather for three winters running coupled with overwhelming increases in fuel prices as well as a deep-seated conviction in Washington that this property must be divided. The government's goals were obtained only through the help of mother nature and the Arabs.

"I wish you all the best of luck. John Mitros and Chris Knapton join me in that sentiment. You have supported us in the face of the fiercest challenges. You have always responded when called upon to do the untried. You have earned the admiration of railroaders everywhere. . . .

"It has been an honor to have held this job. We leave with pride in what has been accomplished and with regret that events moved too fast for success."

Was there, in fact, a "deep-seated conviction in Washington" that the Rock had to die so that the carcass could be carved up? Senior Editor Gus Welty has examined the documents in the case; he reports his findings in the news analysis that appears on page 8.

RAILROADING (AND SUPPLYING RAILROADS) FOR PROFIT

How are railroad suppliers performing insofar as quality control is concerned? Are railroads themselves contributing to a downturn in quality control with their erratic buying practices?

Should suppliers bear the brunt of R&D—or must railroads share the burden to a greater extent than they now do?

Is there enough competition among suppliers? Is there too much?

To what extent should purchasers hew to a "Buy America" policy?

There are no easy answers to these questions; you certainly won't find them in our report, "The buyer and his need for quality," the latest in our Railroading for Profit series (p. 40). What you will find is a thoughtful, and we believe useful, discussion of the railroad-supplier relationship. Senior Editor Gus Welty's own conclusion, after extensive talks with both sides, is this:

"Right now, both railroads and their suppliers have good deals going—railroads with a lot of competition going, foreign and domestic, and suppliers with order books that don't have a lot of room left, this year, next year, and in some cases, the year after that.

"But for the long pull? For profitability on both sides, buyer and seller, responsibilities have to be accepted on both sides."

RAILWAY AGE

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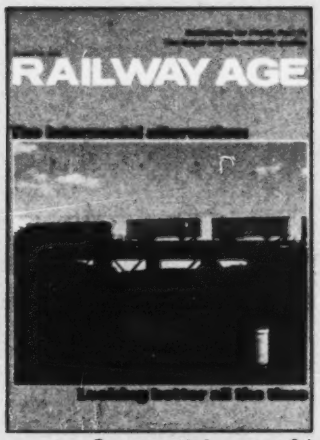

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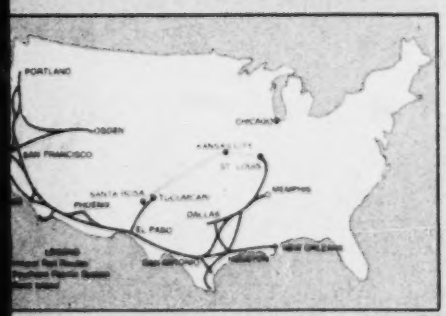

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48 How SP cuts empty-car miles

The railroad's strategy means, among other things, that some time-honored traditions have had to go out the window—such as sending foreign cars home empty, and seeking rapid return of its own cars, even though empty.

54 Feds back SP bid for Tucumcari line

SP (through its Cotton Belt subsidiary) has long wanted that piece of the Rock that extends from St. Louis to Santa Rosa, N.M., near Tucumcari, and it has now picked up support of both the DOT and the Department of Justice—for reasons that not all western roads will go along with.

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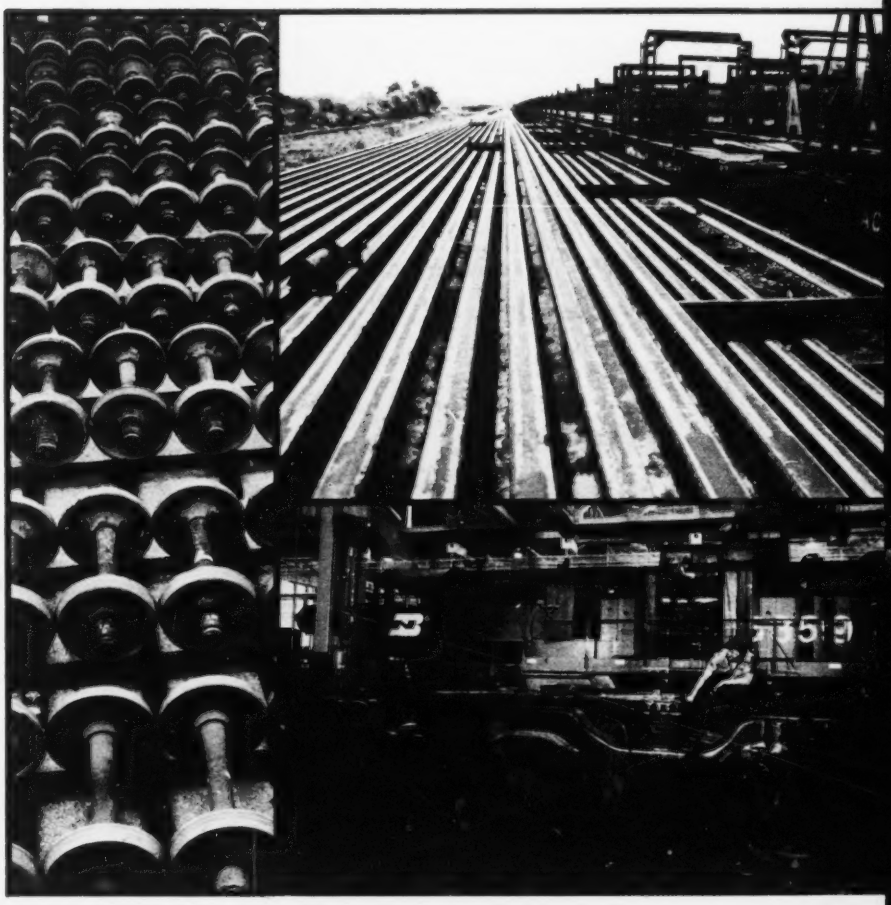
COVER: A Milwaukee Road "Sprint" train at Wisconsin Dells; photo by Jim Scribbens of the Milwaukee.

FIFTH IN A SERIES

Railroading for Profit

The buyer and his need for quality

By GUS WELTY, Senior Editor



Six or seven hundred thousand dollars, or more, for a new diesel-electric locomotive.

Thirty, forty, fifty, sixty thousand dollars for a freight car, depending on the type.

Twelve thousand dollars for a TOFC trailer.

One hundred thousand dollars for a tamper.

Almost $2.8 billion in capital expenditures last year by Class I railroads alone, with close to $2 billion going for equipment and the rest to the fixed plant.

More than $8.5 billion in 1978, cash expenses, for maintenance of equipment, track, and structures.

Upwards of four billion gallons of diesel fuel consumed in the process of providing transportation for 35.8% of the nation's commerce, four billion gallons purchased at an average '78 price of 38 cents a gallon.

Inflation and the cost of borrowed money well into double-digit figures and climbing.

When all the numbers are collected for 1979, few if any will be down, Most, perhaps all, will be up.

What do the numbers add up to? They add up to a word: pressure. Pressure on those who buy for the railroad industry, pressure on those who sell to the railroad industry. Pressure on the buyer to spend the railroad's money wisely, pressure on the seller to deliver a quality product. Pressure on both buyer and seller to protect and contribute to profitability—railroad profitability and supplier profitability.

Like the relationship between railroad and shipper, the relationship between railroad and supplier has its rough edges, buyer and seller each believing that the other could be doing more to produce a smoother interaction.

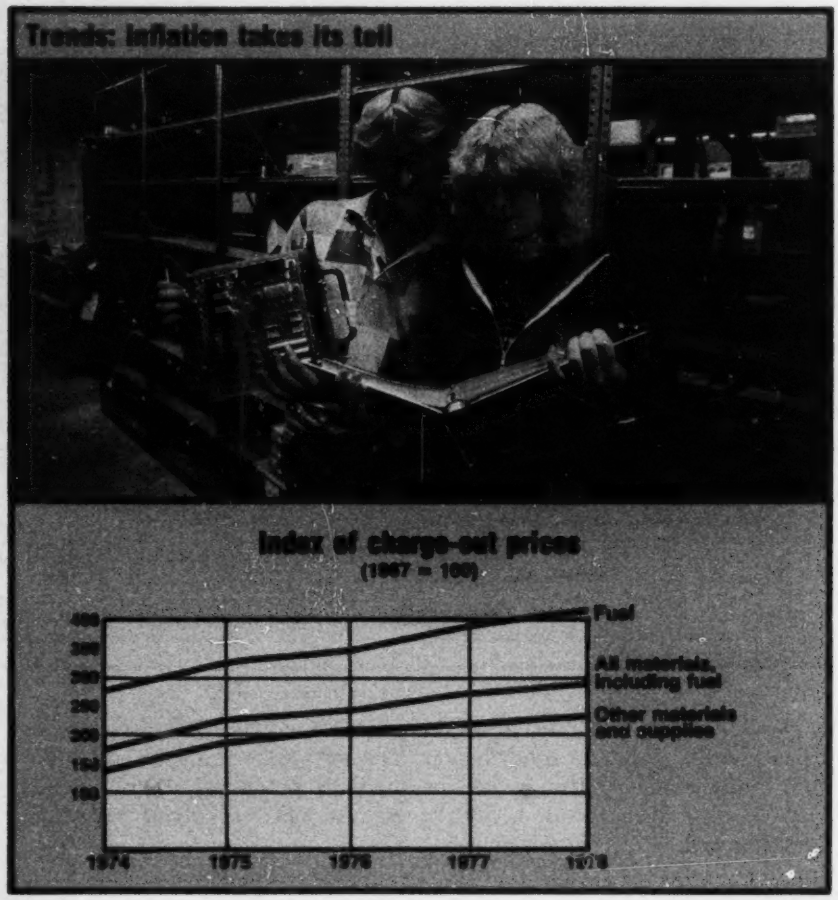
And where are the edges roughest? Perhaps in such areas as product quality control, research and development, quantity and quality of competition, foreign buying, and long-range planning of purchases.

As might be expected, buyers and sellers are not always in agreement on these areas, nor is there even complete agreement among those who are signing the purchase orders.

On quality control, for example, one chief purchasing officer says that it's "generally pretty good." Another regards it as "quite adequate." But a third has this harsher observation: "With regard to which product areas now exhibit good quality control, I would say practically none."

There is, of course, a buyer responsibility as well as a seller responsibility in the product quality area, and the buyer who finds quality control to be quite adequate out-

What can be done to smooth out the rough edges in the railroad-supplier relationship—in such areas as product quality control, R&D, foreign buying, the quantity and quality of competition, and long-range planning?



lines that responsibility this way: "If a purchasing department has done a good job of eliminating the not-so-reliable suppliers from the bid lists in the first place, the people who do bid on and get the business should be quite capable of furnishing a quality product. If I had to pick an area where quality control was the weakest, I would have to say it's at some of the rail mills in this country, and this is particularly true in the old mills that still use gag presses. In times when business is very good, we have also had some problems in quality control on castings, that is, on side frames and bolsters, couplers, and yokes."

The good-business theme carries over into the comments of another top purchasing officer, whose road is one that sets quality control measurements above and beyond basic AAR requirements. At the root of the quality problems, he believes, is the simple fact that "most vendors of railroad products are at maximum production levels, as they attempt to meet demand for products such as wheels, rail, castings, track tools, track fasteners, and so forth. When this occurs, we always note a significant downturn in quality control."

As for where there's specific room for improvement, he cites freight car castings, wheels—and track tools: "I mention track tools because of the fact that any striking tool without proper hardening of the steel can cause injuries. If the truth were known, many railroads are experiencing an exorbitant number of injuries due to the chipping of track tools, and we are working closely with various manufacturers to remedy this situation."

On the supplier side, manufacturers cite stiffened requirements from both FRA and AAR relating to quality control, but requirements that can be met: "As suppliers, we have progressed to a point where our customers must now determine if they are willing to pay for an even better quality product. By this, I mean that we could supply a 'gold-plated' product, if that is really what they want."

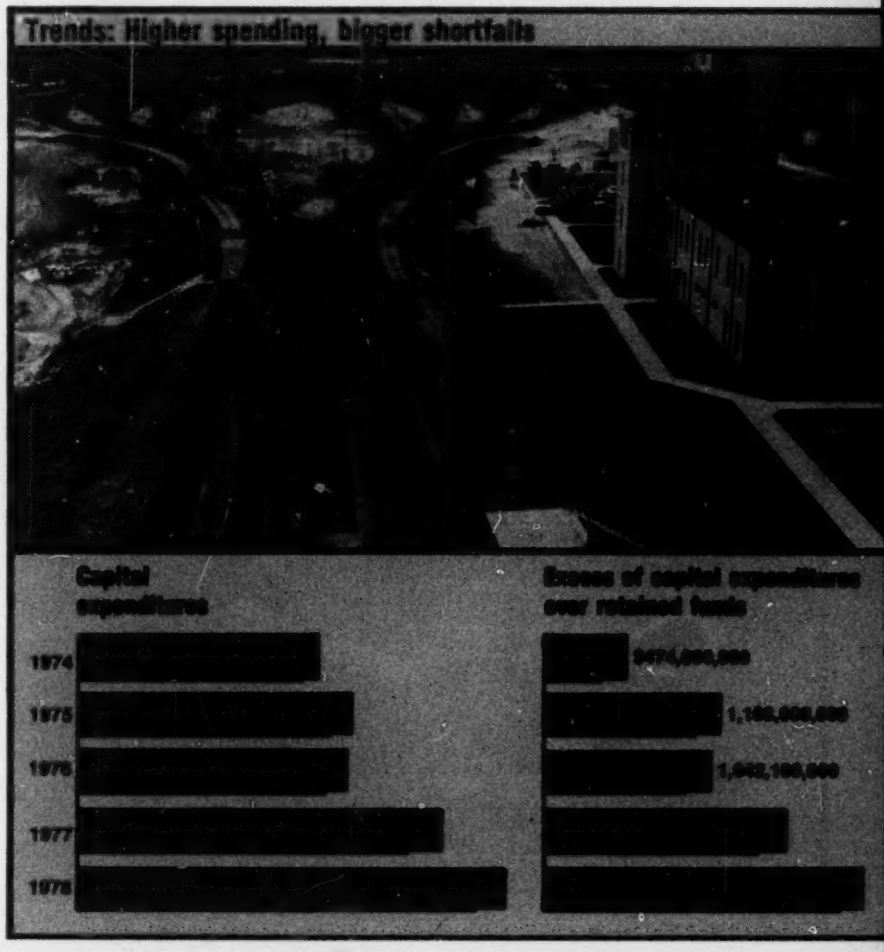
As one major supplier sums it up: "I suspect that volumes could be written on quality control—because it appears to have different meanings to different people. The real effort in quality control should be on the manufacturer to put out a quality product, recognized as such by the industry. If this were being done, the policing as to quality of products would literally disappear—including both railroad and AAR efforts."

On current research and development efforts, buyers would generally give suppliers high marks—but again, with a few reservations. One purchasing officer, for in-

stance, thinks that overall, suppliers "are doing a pretty good job on R&D"—but at the same time he believes that "improvements could definitely be made in the area of foundry items."

A second buyer sees "significant work being done in R&D to improve most equipment and machines that we use." This however, may be due in large part "to the fact that most suppliers are in a boom situation and have sufficient funds to beef up their research and development operations. Sad to say, when we enter a recession period and railroads drastically reduce their purchasing levels, many of our manufacturers tend to cut down on R&D due to a lack of funds." What could help even out this on-again, off-again situation? Perhaps a greater sharing of the R&D burden by the railroads themselves, not many of which today have a significant R&D capability.

Like their counterparts in mechanical departments and transportation departments, purchasing officers tend to agree that trucks and running gear should get top priority in research and development work. In this context, several cite the "considerable amount" of testing being done at DOT's Pueblo Test Center—though one purchasing officer raises a question as to whether there are enough qualified people now available to analyze the mass of data being produced from operations at Pueblo.

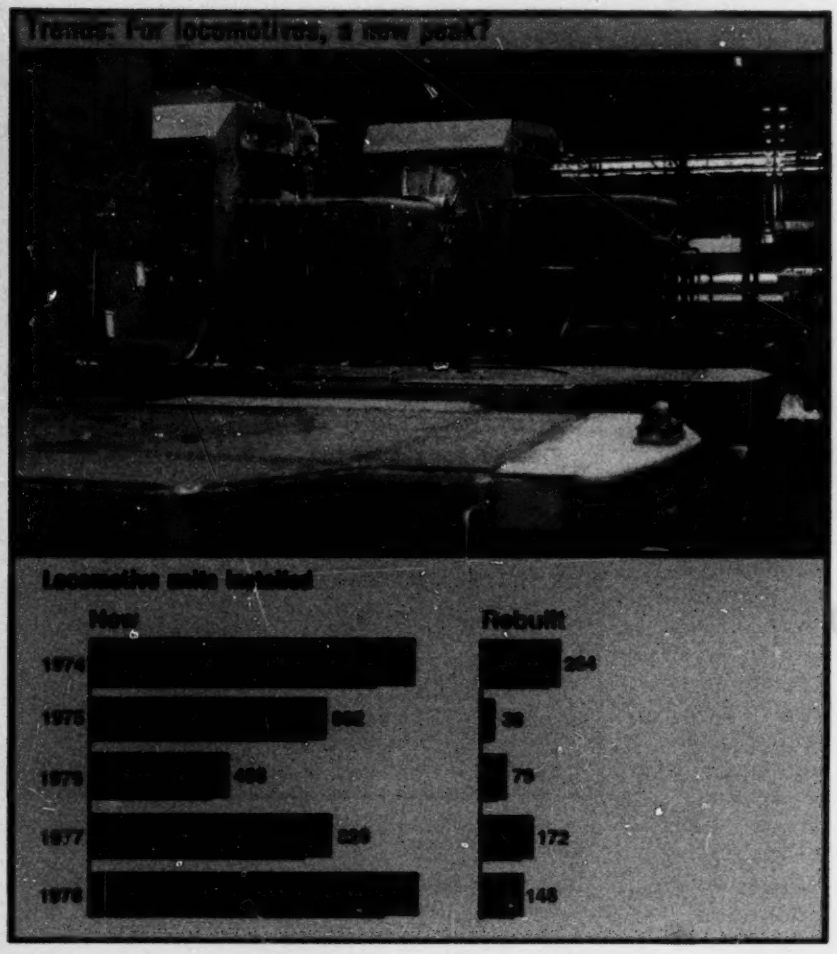


For the most part, suppliers seem to be encouraged by what's happening out there in the Colorado desert, though some continue to question the timeliness and value of reporting methods. And suppliers join wholeheartedly in whatever railroad people have to say about cooperative effort. As one puts it, R&D leading to product improvement "should be shared by suppliers and railroads, with some government-type assistance." After all, he points out, "in order for any supplier to be able to develop a new product, he must be able to get the help of the railroads in order to test it, and since the AAR is the approving body, naturally their cooperation is needed also." This supplier's view: "Good R&D leads to a better product and, therefore, helps the railroads—and so a better and more cooperative relationship among all parties is required."

Another manufacturer is in general agreement, though he puts the emphasis a little differently: "The main burden of R&D lies with the suppliers, because they have the most to gain. However, R&D must be a cooperative effort, with the railroads providing help in defining future needs and the government supplying some financial backing."

Then, there is that matter of competition in the supply industry—and while it would be hard, no doubt, to find a supplier welcoming more competition, at least some purchasing officers see a few areas where another producer or two might find a place in the market. One buyer cites the areas of castings, wheels, rail and track work, and locomotives; another mentions locomotives and bearings —but overall, purchasing agents are not really complaining about lack of competition.

"Over most product lines," one observes, "there is, in fact, enough competition." Another agrees, with a couple of exceptions: "In most of the areas in which we buy there's enough competition and there are ample supply options; although all are not of equal quality, they are available. Of course, one of the areas where we used to have all kinds of competition but no longer do is the area of diesel fuel oil and diesel lube oil—which happen to be



among our largest dollar volume purchases. In addition, certain carbuilders seem to have specialized to the extent that there are only one or two sources of supply for certain types of cars."

Yet another top purchasing officer, also agreeing that there's sufficient competition in most areas, does note that on locomotives and roller bearings "we have only two domestic suppliers."

Then there is what has long been the nature of the business: up, down, up, down. As one buyer observes, in the freight car area "there appear to be enough carbuilders to offer competition—until we get into a market such as we are in now, where lead times are anywhere from 18 to 24 months. Then, competition means nothing—and it simply becomes a matter of who has available space. Due to the fact that railroad purchasing is highly cyclical, we're faced with the problem of having an inadequate number of suppliers in peak periods and not enough purchasing power to support these producers when we are in our famous valleys. Therefore, railroads contribute to the problem."

One of those carbuilder-producers couldn't agree more: "The railroads that we sell to have, in some cases, long-range buying plans—but some of the very large railroads do fail to communicate with carbuilders and other suppliers about their long-range purchasing plans. Frankly, I think this is an area where great improvement could be made—with railroads establishing three- to five-year projected buying plans and placing this business as early as possible. This, in turn, will allow builders and suppliers to do good production planning—which would reduce costs. Railbox has recently taken this position, and I think in the long run they will benefit from their planning. Under today's conditions with respect to purchasing, financing, contracting, and so forth, railroad buyers must realize that longer lead times on their requirements are essential in order to avoid the 'shotgun' effect which has existed in this industry for years. Business is just too complicated today for businessmen to avoid long-range planning. Railroads must recognize that good long-range planning definitely aids them in their cost reduction programs."

Amen: "Some roads plan well and some don't. The general feeling is that they do not plan far enough in advance—although we are seeing more cooperation now because of the 'crunch' situation. Still, railroads need to be more open and definititive about their buying plans."

Planning may in fact be the biggest problem facing both buyer and seller, as some buyers and sellers insist it is. And while planning tools have become better during the 1970s, the peaks and valleys have still been there—down to the valley in the 1974-75 recession, up to the peak during the past couple of years, years that have been complicated by a surge of nonrailroad buying of railroad equipment. Back in '75, few in the industry might have forecast the peaks purchasing has reached, and fewer still would have forecast buying levels staying so long on the high side. But spending is up; some believe it's going to stay up for the foreseeable future—if railroad earnings are allowed to rise and railroads are thus able to take advantage of their energy efficient position in transportation—and that high level of spending has created its own set of problems.

One of those problems, both for railroads and for domestic suppliers is foreign sources of supply.

Railroad purchasing agents are somewhat ambivalent.

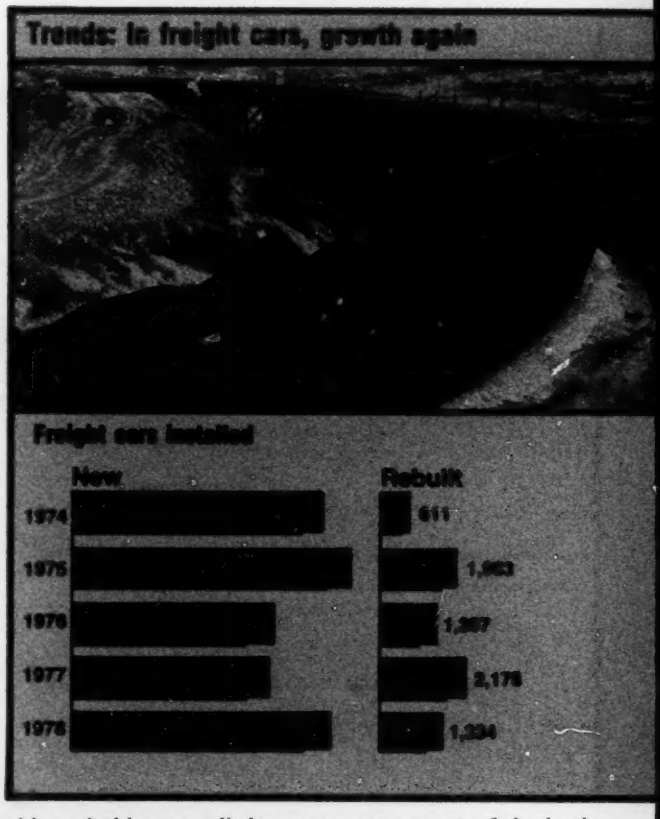
One will note that offshore suppliers "generally do a good job on quality and delivery schedules." At the same time, he backs away from a policy that would be detrimental to U.S. suppliers, and he fears that during a downturn foreign supply sources might present problems because of long lead times and dollar fluctuations.

Another buyer points out that today, "to meet certain schedules, we are forced to go overseas for certain products." While he does not believe railroads should adhere strictly to a "Buy America" policy, he would like to see most purchasing done in this country. A possible exception is rail, especially rail to be installed on curves; the quality is good, this buyer says, and "we continue to purchase from foreign sources even during normal times."

Yet another buyer brings up factors of both price and supply: "I believe we should buy American unless the cost is 'way out of line, let's say by 30%. On the other hand, if we cannot get a product here which we need to maintain our railroad, then we must go to a foreign country to buy it. The only other reason I can think of for buying off-shore, if you don't have a large disparity in price or you don't have a shortage in supply, would be to maintain a relationship with the foreign source—in anticipation of another shortage." But, this purchasing officer adds, "When railroad buying turns down from high levels, American suppliers get more competitive—and, it seems, the foreign suppliers get less competitive. It all becomes a question of capacity and supply and demand."

That question, as it happens, is more critical in some areas than in others. One of the critical areas is heavy castings, where several domestic manufacturers are spending many millions of dollars to increase capacity even as railroads and carbuilders are bringing in castings from, almost literally, all over the world. What happens, then, when the inevitable downturn in demand for castings comes? In the words of one castings manufacturer, "we're putting a lot of money into a good-faith attempt to increase our production capacity. We would certainly hope for—and expect—a good-faith response from the people we sell to."

A carbuilder adds these observations, looking at today and at the future: "I've always been an advocate of support for American manufacturers of all products for the railroad market. Naturally, when we get into an expanded market, additional material supply is needed—and the first place carbuilders and other purchasers run to is the foreign source. This has caused great distortion in the supply market, and, as one result, carbuilders have had to enter into unfavorable long-term contracts with some suppliers who are merely protecting their market." How does he view the problem, long range? "The railroad industry makes its living hauling domestic freight, and for this reason we should give support first to domestic manufacturers. I'm confident that when the demand levels turn down, the foreign manufacturer will suffer the greatest loss—but each time this happens the foreigner is



able to hold onto a little greater percentage of the business."

What does the future hold, for buyers and sellers, both concerned with profitability? The past, unfortunately, doesn't offer up many answers.

In olden times, which now equates with pre-World War II, railroads did a lot for themselves.

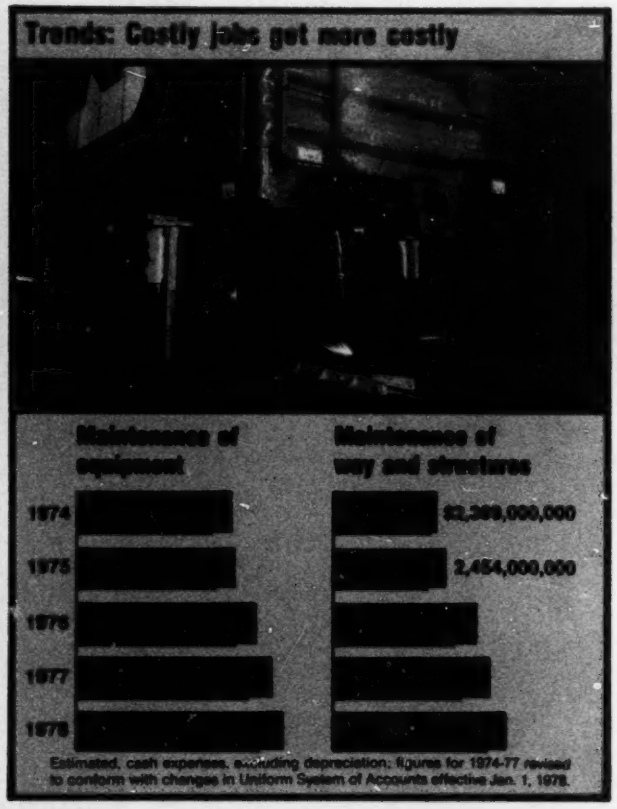
Railroads had big carbuilding operations. Today, you can count railroad builders of new freight cars, major builders, without using all the fingers on one hand.

Railroads, back then, were big in the locomotive business, either in building or in dictating design. Today, locomotives come in basic designs, almost all of them from manufacturing plants in Illinois and Pennyslvania, and while the chief mechanical officer and others involved in purchasing have certain options, the locomotive bears the imprimatur of GM and GE, not the CMO.

Track machines, signal systems, communications gear, computers? Much the same might be said: Railroads have an input, in terms of what they need—but it is the supplier, the GM or the GE or the IBM or whoever, who figures out his own way to meet that need.

This is not a bad situation to be in, actually. Railroads are, after all, in the transportation business, not the manufacturing business, and, for the most part, suppliers are doing an excellent job of listening to railroads when they describe their requirements.

At the same time, railroads appear to be doing a better



job of communicating internally, among responsible people in transportation, mechanical, engineering, purchasing. And that can only help, in good times as well as in bad. Although not everybody would agree on this, railroads also seem to be improving in their long-range planning capability. Probably there will never be a time when a sharp downturn in traffic will not produce order cancellations; nevertheless, more roads are looking at needs beyond next week or next month.

Suppliers, as in the past, have largely to rely on hope, prayer, and the confidence in their own products. The veteran suppliers have been down the road before—as in the mid-1960s, when a booming market brought all sorts of new people into the supply business, and the later 1960s, when many of those new people became dropouts. There wasn't much foreign competition then, but today there is—and only time will tell whether the foreign suppliers will continue to have any substantial segment of the U.S. railroad market. Only time will tell, too, who will choose—or be able—to survive in the domestic market when the inevitable downturn comes.

The key here may lie in the definition of "the inevitable downturn." A second key, if there is one, may lie in the identification of suppliers who are willing and able to put money into product improvement, R&D, and testing, suppliers who make the needed investment in product and production capacity needed in order to keep up with what might be, in fact, a continuing growth market.

Some top railroad officers question whether technology can take the industry much further, admitting that technology has had a lot to do with preserving it but wondering if technology can do all that much more, absent the improved flexibility in actual rail operations that can come only with new agreements with rail labor.

One chief executive went so far as to observe, publicly, that it could be "that techology alone has taken us about as far as it can." But a top purchasing officer is not so pessimistic. Man has not been able to develop a mode of transportation as efficient as the railroad, he believes, and there's more yet to come, as regards the old steel wheel-steel rail interface: "We've got to keep looking for technological breakthroughs to do our job better, and we need the railway supply trade's expertise and productivity to do it."

As for the supply industry itself, in many cases R&D funds are not lacking, or should not be lacking.

Railroad people sometimes decry the fact that a number of major suppliers either never were in the railroad business primarily or have diversified into other product lines. But just as the formation of holding companies has enabled railroads to diversify—and thus broaden their earnings base—so does a broad base mean something in terms of supplier capability in undertaking R&D and product development related to the railroad industry.

Where is the future, though, for railroads and the companies that sell to railroads?

For suppliers, old and new, who are in the business for the long haul, the future is not bad at all. Railroads will not be less in the marketplace than they have been in recent years, conceding the likelihood of an economic aberration or two. For suppliers who have come in only because they've sensed an opportunity, however, there are testing times ahead. If they come through with decent quality at good prices, they'll make it—and if they don't on either count, they're going to go the way that new entries went back in the late 1960s.

Railroads? There is, most simply put, no way that railroads can keep on with the peak-and-valley thing and expect suppliers to invest heavily in either R&D capability or production capability. Railroads make much of their need for an improved return on investment—but supplier needs in that area are no less, and much-less-regulated manufacturing companies are not going to stay long in markets where there is not a respectable profit to be made.

Right now, both railroads and their suppliers have good deals going—railroads with a lot of competition going, foreign and domestic, and suppliers with order books that don't have a lot of room left, this year, next year, and, in some cases, the year after next.

But for the long pull? For profitability on both sides, buyer and seller, responsibilities have to be accepted on both sides. ■

Market

CARLOADINGS

Loadings of revenue freight in the week ended Oct. 6 totaled 486,316 cars, according to the Association of American Railroads. This was a decrease of 34,488 cars, or 6.6%, compared with the corresponding week last year. Ton-miles generated by carloadings in the week ended Oct. 6 are estimated at 18.4 billion, a decrease of 3.6% below the corresponding week of 1978.

REVENUE FREIGHT CARLOADINGS

Commodity	Oct. 6 week	Sept. 29 week	Sept. 22 week
Grain	31,189	30,002	30,215
Farm products	4,688	3,735	3,686
Metallic ores	37,805	38,234	37,499
Coal	113,345	113,593	110,525
Crushed stone, gravel & sand	17,267	18,765	17,921
Nonmetallic minerals	14,948	16,127	17,324
Grain mill products	17,313	18,397	17,475
Food and kindred products	18,713	19,932	19,137
Primary forest products	20,732	20,594	20,597
Lumber & wood products (except furniture)	11,490	12,460	12,598
Pulp, paper & allied products	21,429	23,135	21,303
Chemicals & allied products	28,525	29,854	28,103
Petroleum products	6,367	6,218	6,199
Stone, clay & glass products	19,697	19,067	19,605
Coke	6,553	6,103	6,049
Metals & products	18,707	19,382	18,655
Motor vehicles & equipment	21,354	22,137	21,189
Waste & scrap materials	13,519	14,152	13,967
Forwarder & shipper assn. traffic	13,740	14,730	14,405
All other carloads	47,931	48,794	48,235
LCL traffic	404	395	375
Total cars loaded	**486,316**	**495,806**	**485,062**

	1979	1978
Cumulative total, 40 weeks	18,412,617	17,689,093
Estimated revenue ton-miles (billions) 40 weeks	688.8	648.6

PIGGYBACK LOADINGS

U.S. piggyback loadings for the week ended Sept. 29 totaled 38,576 cars (36.9% above the corresponding 1978 week) and 68,978 trailers or containers (up 34.3% from 1978). The large increases were attributed to the strike last year by the Brotherhood of Railway and Airline Clerks. Cumulative volume for the first 39 weeks of 1979 is 1,397,482 cars (up 2.4% from 1978) and 2,466,355 trailers or containers (up 4.5% from 1978).

CANADIAN CARLOADINGS

Canadian railway revenue freight loaded in the seven-day period ended Sept. 14 totaled 5.9 million tons (up 9.7% from 1978). Cars loaded totaled 87,485 (up 7.4% from 1978). Cumulative loadings for 1979 were up to 182.1 million tons (up 11.3% from 1978).

● *Louisville & Nashville.*—Will spend $1.86 million to add a second main track on a portion of its Corbin-Knoxville line in order to reduce congestion and delays at Corbin Yard.

● *Santa Fe.*—Ordered two Sperry Univac 1100/82 computer systems, valued at approximately $15 million, for installation at Topeka, Kans. Equipment to be supplied to Santa Fe includes six Univac 8450 disk drives, six magnetic tape units, a high-speed printer and four data communication subsystems per system, and 700 Sperry Univac UTS 400 intelligent terminals. Currently the Santa Fe operates one Sperry Univac 1100/82 computer system. Previously the railroad used two Univac 1106 computers.

● *Southern.*—Placed orders for freight cars, trailers, and locomotives valued at $214 million for 1980 delivery. Car orders include 900 boxcars to be built by Pullman Standard at Bessemer, Ala., and Fruit Growers Express at Alexandria; 500 covered hoppers from Pullman Standard's Butler, Pa., plant; 500 gondolas, 800 pulpwood cars, and 150 wood chip hopper cars from Greenville Steel Car at Greenville, Pa.; 150 wood chip gondolas and 120 coal hopper cars from Ortner Freight Car of Covington, Ky.; and 105 enclosed trilevel auto carriers from Whitehead and Kales of Detroit. Fruehauf will build 1,200 trailers at its Memphis plant. Electro-Motive will supply 76 new locomotives.

● *Freight cars and locomotives.*—The following report has been received from the AAR and the ARCI:

DELIVERED

	August 1979	August 1978	July 1979	Eight Months 1979	Eight Months 1978
Built new by carbuilders	7,753	6,198	5,608	55,156	38,151
Built new in RR shops	298	499	266	3,212	3,168
Built new—total	8,051	6,697	5,874	58,368	41,319
Rebuilt	104	0	90	622	1,287
TOTAL DELIVERED	**8,155**	**6,697**	**5,964**	**58,990**	**42,606**
Locomotives (new and rebuilt)	159	91	100	1,112	840

ORDERED

To be built new by carbuilders	7,519	13,086	6,293	84,482	86,537
To be built new in RR shops	1,200	500	700	2,813	1,284
To be built new—total	8,719	13,586	6,993	87,295	87,821
To be rebuilt	191	0	84	645	122
TOTAL ORDERED	**8,910**	**13,586**	**7,077**	**87,940**	**87,943**

ON ORDER AND UNDELIVERED

	September 1 1979	September 1 1978	August 1 1979	Average Backlog 1979	Average Backlog 1978
To be built new by carbuilders	117,305	78,197	119,793	112,332	52,269
To be built new in RR shops	5,912	4,536	5,010	5,515	5,346
To be built new—total	123,217	82,733	124,803	117,847	57,615
To be rebuilt	110	111	23	103	605
TOTAL ON ORDER	**123,327**	**82,844**	**124,826**	**117,950**	**58,220**
Locomotives (new and rebuilt)	723	883	912	1,068	705